

DRAFT FOR MARCH 17, 2011 BOARD CONSIDERATION

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
CENTRAL COAST REGION**

**MONITORING AND REPORTING PROGRAM
ORDER NO. R3-2011-0006-04**

THIRD PARTY GROUP PARTICIPANTS

**DISCHARGERS ENROLLED UNDER
THE CONDITIONAL WAIVER OF WASTE DISCHARGE REQUIREMENTS FOR
DISCHARGES FROM IRRIGATED LANDS**

This Monitoring and Reporting Program Order No. R3-2011-0006-04 (MRP) is issued pursuant to California Water Code (Water Code) section 13267 and 13269, which authorize the California Regional Water Quality Control Board, Central Coast Region (hereafter Central Coast Water Board) to require preparation and submittal of technical and monitoring reports. Water Code section 13269 requires a waiver of waste discharge requirements to include as a condition, the performance of monitoring and the public availability of monitoring results. The Conditional Waiver of Waste Discharge Requirements for Discharges from Irrigated Lands Order No. R3-2011-0006 (Order) includes criteria and requirements for three tiers. The Order also includes an alternative to complying with the criteria and requirements that apply specifically to tier 2 and/or tier 3 Dischargers. This MRP sets forth monitoring and reporting requirements for **Dischargers** that are enrolled under the Order and that have selected Compliance with Additional Conditions of the Order by Participating in Third Party Groups, as allowed in Part F of the Order (Third Party Group Participants). A summary of the requirements is shown below.

**SUMMARY OF MONITORING AND REPORTING REQUIREMENTS FOR THIRD
PARTY GROUP PARTICIPANTS:**

- Part 1: Surface Receiving Water Monitoring and Reporting (*cooperative or individual*);
- Part 2: Third Party Group Reporting Requirements

Pursuant to Water Code section 13269(a)(2), monitoring requirements must be designed to support the development and implementation of the waiver program, including, but not limited to, verifying the adequacy and effectiveness of the waiver's

conditions. The monitoring and reports required by this MRP are to evaluate affects of discharges of waste from irrigated agricultural operations on waters of the state and to determine compliance with the Order.

MONITORING AND REPORTING BASED ON TIERS

The Order and MRP includes criteria and requirements for three tiers, based upon those characteristics of the operation or characteristics of individual farms/ranches at the operation that present the highest level of waste discharge or greatest risk to water quality. The Order also includes an alternative for Dischargers to join in a third party-group that meets the requirements specified in Attachment B to the Order. Dischargers must meet conditions of the Order and MRP for the appropriate tier that applies to their land and/or their operations, or alternatively join a third party group that meets the requirements specified in Attachment B to the Order. Within a tier, Dischargers comply with requirements based on the specific level of discharge and threat to water quality from individual farms/ranches. For those Dischargers choosing to comply with certain conditions and requirements by joining a third-party group, they must comply with the general terms and conditions applicable to all tiers. However, the requirements specific to those considered to be in Tier 2 or Tier 3 are not applicable to those that have decided to join a third-party group. In lieu of complying with the requirements applicable to Tier 2 and Tier 3 Dischargers, third-party group participants agree to work with the third-party group and to be subject to audits to ensure that appropriate management practices are being implemented. The lowest tier, Tier 1, applies to dischargers who discharge the lowest level of waste (amount or concentration) or pose the lowest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. The highest tier, Tier 3, applies to dischargers who discharge the highest level of waste or pose the greatest potential to cause or contribute to an exceedance of water quality standards in waters of the State or of the United States. Tier 2 applies to dischargers whose discharge has a moderate threat to water quality. Water quality is defined in terms of Regional, State, or Federal numeric or narrative water quality standards. Per the Order, Dischargers may submit a request to the Executive Officer to approve transfer to a lower tier.

PART 1. SURFACE RECEIVING WATER MONITORING AND REPORTING REQUIREMENTS

Monitoring and reporting requirements for surface receiving water identified in Part 1.A. and Part 1.B. apply to Third Party Group Participants. Surface receiving water refers to water flowing in creeks and other surface waters of the State. Surface receiving water monitoring may be conducted through a **cooperative monitoring program**, or Dischargers may choose to conduct surface receiving water monitoring and reporting individually. Key monitoring and reporting requirements for surface receiving water are shown in Tables 1 and 2. Time schedules are shown in Table 4.

A. Surface Receiving Water Quality Monitoring

1. Dischargers must elect a surface receiving water monitoring option (cooperative monitoring program or individual receiving water monitoring) to comply with surface receiving water quality monitoring requirements, and identify the option selected on the Notice of Intent (NOI).
2. Dischargers are encouraged to choose participation in a cooperative monitoring program (e.g. the existing Cooperative Monitoring Program or a similar program) to comply with receiving water quality monitoring requirements. Dischargers not participating in a cooperative monitoring program must conduct surface receiving water quality monitoring individually that achieves the same purpose.
3. Dischargers (individually or as part of a cooperative monitoring program) must conduct surface receiving water quality monitoring to a) assess the impacts of waste discharges from irrigated lands to receiving water, b) assess the status of receiving water quality and beneficial use protection in impaired waterbodies dominated by irrigated agricultural activity, c) evaluate status, short term patterns and long term trends (five to ten years or more) in receiving water quality, d) evaluate water quality impacts resulting from agricultural discharges (including but not limited to tile drain discharges), e) evaluate stormwater quality, f) evaluate condition of existing perennial, intermittent, or ephemeral streams or riparian or wetland area habitat, including degradation resulting from erosion or agricultural discharges of waste, and g) assist in the identification of specific sources of water quality problems.

Surface Receiving Water Quality Sampling and Analysis Plan

4. **Within three months** of adoption of the Order, Dischargers (individually or as part of a cooperative monitoring program) must submit a surface receiving water quality Sampling and Analysis Plan and Quality Assurance Project Plan (QAPP). Dischargers (or a third party cooperative monitoring program) must develop the Sampling and Analysis Plan to describe how the proposed monitoring will achieve the objectives of the MRP and evaluate compliance with the Order. The Sampling and Analysis Plan may propose alternative monitoring site locations, adjusted monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water. The Executive Officer must approve the Sampling and Analysis Plan and QAPP.
5. The Sampling and Analysis Plan must include the following minimum required components:

- a. Monitoring strategy to achieve objectives of the Order and MRP;
 - b. Map of monitoring sites with GIS coordinates;
 - c. Identification of known water quality impairments and impaired waterbodies per the 2010 Clean Water Act 303(d) List of Impaired Waterbodies (List of Impaired Waterbodies);
 - d. Identification of beneficial uses and applicable water quality standards;
 - e. Identification of applicable Total Maximum Daily Loads;
 - f. Monitoring parameters;
 - g. Monitoring schedule, including description and frequencies of monitoring events;
 - h. Description of data analysis methods;
6. The QAPP must include receiving water and site-specific information, project organization and responsibilities, and quality assurance components of the MRP. The QAPP must also include the laboratory and field requirements to be used for analyses and data evaluation. The QAPP must contain adequate detail for project and Water Board staff to identify and assess the technical and quality objectives, measurement and data acquisition methods, and limitations of the data generated under the surface receiving water quality monitoring. All sampling and laboratory methodologies and QAPP content must be consistent with U.S. EPA methods, State Water Board's Surface Water Ambient Monitoring Program (SWAMP) protocols and the Central Coast Water Board's Central Coast Ambient Monitoring Program (CCAMP). Following U.S. EPA guidelines¹ and SWAMP templates², the receiving water quality monitoring QAPP must include the following minimum required components:
 - a. Project Management. This component addresses basic project management, including the project history and objectives, roles and responsibilities of the participants, and other aspects.
 - b. Data Generation and Acquisition. This component addresses all aspects of project design and implementation. Implementation of these elements ensures that appropriate methods for sampling, measurement and analysis, data collection or generation, data handling, and quality control activities are employed and are properly documented. Quality control requirements are applicable to all the constituents

¹ USEPA. 2001 (2006) USEPA Requirements for Quality Assurance Project Plans (QA/R-5) Office of Environmental Information, Washington, D.C. USEPA QA/R-5

² http://waterboards.ca.gov/water_issues/programs/swamp/tools.shtml#qa

- sampled as part of the MRP, as described in the appropriate method.
- c. Assessment and Oversight. This component addresses the activities for assessing the effectiveness of the implementation of the project and associated QA and QC activities. The purpose of the assessment is to provide project oversight that will ensure that the QA Project Plan is implemented as prescribed.
 - d. Data Validation and Usability. This component addresses the quality assurance activities that occur after the data collection, laboratory analysis and data generation phase of the project is completed. Implementation of these elements ensures that the data conform to the specified criteria, thus achieving the MRP objectives.
7. The Central Coast Water Board may conduct an audit of contracted laboratories at any time in order to evaluate compliance with the QAPP.
8. The Sampling and Analysis Plan and QAPP, and any proposed revisions are subject to approval by the Executive Officer. The Executive Officer may also revise the Sampling and Analysis Plan, including adding, removing, or changing monitoring site locations, changing monitoring parameters, and other changes as necessary to assess the impacts of waste discharges from irrigated lands to receiving water.

Surface Receiving Water Quality Monitoring Sites

9. The Sampling and Analysis Plan must, at a minimum, include monitoring sites to evaluate waterbodies identified in Table 1. The Sampling and Analysis Plan must include sites to evaluate receiving water quality impacts most directly resulting from areas of agricultural discharge (including areas receiving tile drain discharges). Site selection must take into consideration the existence of any long term monitoring sites included in related monitoring programs (e.g. CCAMP and the existing CMP). Sites may be added or modified, subject to prior approval by the Executive Officer, to better assess the pollutant loading from individual sources or the impacts to receiving waters caused by individual dischargers. Any modifications must consider sampling consistency for purposes of trend evaluation.

Surface Receiving Water Quality Monitoring Parameters

10. The Sampling and Analysis Plan must, at a minimum, include the following types of monitoring and evaluation parameters listed below and identified in Table 2:

- a. Flow Monitoring;
 - b. Water Quality (physical parameters, metals, nutrients, pesticides);
 - c. Toxicity (water and sediment);
 - d. Assessment of Benthic Invertebrates;
11. All analyses must be conducted at a laboratory certified for such analyses by the State Department of Public Health (CDPH) or at laboratories approved by the Executive Officer. Unless otherwise noted, all sampling, sample preservation, and analyses must be performed in accordance with the latest edition of *Test Methods for Evaluating Solid Waste*, SW-846, U.S. EPA, or other EPA approved test methods, and analyzed as specified herein by the above analytical methods and reporting limits indicated. Certified laboratories can be found at the web link: <http://www.cdph.ca.gov/certlic/labs/Documents/ELAPLablist.xls>
12. Water quality and flow monitoring is used to assess the sources, concentrations, and loads of waste discharges from individual operations and groups of Dischargers to surface waters, to evaluate impacts to water quality and beneficial uses, and to evaluate the short term patterns and long term trends in receiving water quality. Monitoring data must be compared to adopted numeric and narrative water quality objectives.
13. Toxicity testing is to evaluate water quality relative to the narrative toxicity objective. Water column toxicity analyses must be conducted on 100% (undiluted) sample. At sites where persistent unresolved toxicity is found, the Executive Officer may require concurrent toxicity and chemical analyses and a Toxicity Identification Evaluation (TIE) to identify the individual discharges causing of the toxicity.

Surface Receiving Water Quality Monitoring Frequency and Schedule

14. The Sampling and Analysis Plan must include a schedule for sampling. Timing, duration, and frequency of sampling must be based on the land use, complexity, hydrology, and size of the waterbody. Table 2 includes minimum sampling frequency and parameter lists. Agricultural parameters that are less common may be monitored less frequently. Modifications to the receiving water quality monitoring parameters, frequency, and schedule may be submitted for Executive Officer consideration and approval. At a minimum, the Sampling and Analysis Plan schedule must consist of monthly sampling of common agricultural parameters in major agricultural areas, including two major storm events during the wet season (October 1 – April 30).

15. Storm event sampling must be conducted within 18 hours of storm events, preferably including the first flush run-off event that results in significant increase in stream flow. For purposes of this MRP, a storm event is defined as precipitation producing onsite runoff (surface water flow) capable of creating significant ponding, erosion or other water quality problem. A significant storm event will generally result in greater than 1-inch of rain within a 24-hour period.
16. **Within six months** of adoption of the Order, Dischargers (individually or as part of a cooperative monitoring program) must initiate receiving water quality monitoring per the Sampling and Analysis Plan and QAPP approved by the Executive Officer.

B. Surface Receiving Water Quality Reporting

Surface Receiving Water Quality Data Submittal

1. **Within nine months** of adoption of this Order and quarterly thereafter (by January 1, April 1, July 1, and October 1), Dischargers (individually or as part of a cooperative monitoring program) must submit water quality monitoring data to the Central Coast Water Board electronically, in a format specified by the Executive Officer and compatible with SWAMP/CCAMP electronic submittal guidelines.

Surface Receiving Water Quality Monitoring Annual Report

2. **Within one year** of adoption of this Order and annually thereafter by January 1, Dischargers (individually or as part of a cooperative monitoring program) must submit an Annual Report electronically, in a format specified by the Executive Officer, including the following minimum elements:
 - a. Signed Transmittal Letter;
 - b. Title Page;
 - c. Table of Contents;
 - d. Executive Summary;
 - e. Summary of Exceedance Reports submitted during the reporting period;
 - f. Monitoring objectives and design;
 - g. Sampling site descriptions and rainfall records for the time period covered;
 - h. Location of sampling sites and map(s);
 - i. Tabulated results of all analyses arranged in tabular form so that the required information is readily discernible;

- j. Summary of water quality data for any sites monitored as part of related monitoring programs, and used to evaluate receiving water as described in the Sampling and Analysis Plan.
- k. Discussion of data to clearly illustrate compliance with the Order and water quality standards;
- l. Discussion of short term patterns and long term trends in receiving water quality and beneficial use protection;
- m. Evaluation of pesticide and toxicity analyses results, and recommendation of candidate sites for Toxicity Identification Evaluations (TIEs);
- n. Identification of the location of any agricultural discharges observed discharging directly to surface receiving water;
- o. Electronic data submitted in a SWAMP/CCAMP comparable format;
- p. Sampling and analytical methods used;
- q. Copy of chain-of-custody forms;
- r. Field data sheets, signed laboratory reports, laboratory raw data;
- s. Associated laboratory and field quality control samples results;
- t. Summary of Quality Assurance Evaluation results;
- u. Specify the method used to obtain flow at each monitoring site during each monitoring event;
- v. Electronic or hard copies of photos obtained from all monitoring sites, clearly labeled with site ID and date;
- w. Conclusions;

PART 2. THIRD PARTY GROUP REPORTING REQUIREMENTS

Monitoring and reporting requirements for third party groups identified in Attachment B to Order No. R3-2011-0006. Key monitoring and reporting requirements and time schedules for such reports for third party groups are shown in Table 3.

A. Submittal of Notice of Intent

1. **Within ninety days** of adoption of the Order, a third party group on behalf of its Participants who are seeking use the third party group as an alternative form of compliance pursuant to Part F of Order No. R3-2011-0006 must submit a completed Notice of Intent to Be A Third Party Group Alternative. The Notice of Intent shall include the name of the third party group, the geographic area and/or commodity for which the third party group intends to offer alternative compliance, contact information, and an explanation as to how the third party group intends to operate and conduct the required functions identified in Attachment B of Order No. R3-2011-0006. .

The Executive Officer shall issue a Notice of Applicability to a Third Party Group that submits a completed NOI in accordance with the provisions in Attachment B of Order No. R3-2011-0006.

B. THIRD PARTY GROUP GENERAL REPORT

2. Each third party group that receives an NOA shall submit a General Report **within six (6) months** of receipt of the NOA. The General Report shall identify the specific criteria and weighting system the third party group intends to use to determine an operations level of risk to water quality for four individual categories identified in Part B.4 of Attachment B to Order No. R3-2011-0006. The General Report shall also identify a proposed process for conducting audit evaluations of at least 20% of Participants' operations each year that are participating in the third party group, and for conducting audit evaluations of all Participants' operations at least once over the term of Order No. R3-2011-0006. The proposed audit process shall prioritize audits of operations by considering conducting audits on operations in impaired watersheds and/or in areas with known nitrate impairments to groundwater first. The minimum requirements of the audit process are contained further in Part B.4 of Attachment B to Order No. R3-2011-0006.

B. Third Party Group Termination Reports

3. Upon a final determination by the third party group that a participant is not taking all reasonable and necessary steps to comply with the terms of Attachment B, the third party group must terminate the participant's participation in the third party group and report the participant's termination to the Central Coast Water Board within 30-days of the participant's failure to respond to the third party group after either exhausting any appeals that are part of the third party groups audit process or after the time to do so has passed. The actual third party groups appeal process shall be explained in the General Report required to be submitted pursuant to Part B.2 of this MRP.

C. Third Party Group Annual Reports

4. Within 1 year of Executive Officer approval of the General Report and annually thereafter, the Third Party group shall submit an report to the Central Coast Water Board that includes the results of the audit evaluations in an aggregated format, and summaries of other activities. The aggregated report shall include the following:
 - i. The names of the Participants in the third party group that are in good standing (e.g., have paid applicable fees);
 - ii. The number of Participants' operations for which audit evaluations were conducted over that 12 month period;

- iii. The identification of the sub-watersheds where the audit evaluations were conducted;
- iv. The names of the Participants whose operations were audited;
- v. An aggregated summary of the audit results (summary of audit results shall not be operator specific). For example, the annual report could indicate the number or percentage of operations that are implementing Farm Water Quality Management Plans and appropriate management practices to control the discharge of pollutants to ground and/or surface water to the maximum extent practicable. An aggregated summary should be provided for each of the four categories of risk to water quality.
- vi. An general summary of assistance that the third party group provided to Participants to assist them in updating Farm Water Quality Management Plans and in implementing management practices;
- vii. An aggregated summary of any educational workshops conducted by the third party group, and a list of the those that attended the educational workshop; and,
- viii. An aggregated summary of any other activities conducted by the third party group towards the improvement of water quality.

PART 3. GENERAL MONITORING AND REPORTING REQUIREMENTS

A. Submittal of Technical Reports

1. Dischargers and/or third party groups must submit reports in a format specified by the Executive Officer. A transmittal letter must accompany each report, containing the following penalty of perjury statement signed by the Discharger, the third party group or the Discharger's authorized agent:

"In compliance with Water Code §13267, I certify under penalty of perjury that this document and all attachments were prepared by me, or under my direction or supervision following a system designed to assure that qualified personnel properly gather and evaluate the information submitted. To the best of my knowledge and belief, this document and all attachments are true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment".

B. Enforcement and Violations

1. Monitoring reports are required pursuant to Section 13267 of the California Water Code. Pursuant to Section 13268 of the Water Code, a violation of a

request made pursuant to Section 13267 may subject you to civil liability assessment of up to \$1000 per day.

C. Revisions to MRP

1. The Central Coast Water Board may revise this MRP in accordance with Water Code section 13267. If revised in accordance with Water Code section 13267, Dischargers must comply with the MRP as revised by the Central Coast Water Board. For the purposes of this Order, the Order, MRP and other requirements are not delegated to the Executive Officer pursuant to Water Code section 13223 except as specifically provided herein. Any and all revisions to this MRP that would increase monitoring and reporting requirements must be approved by the Central Coast Water Board.. The Executive Officer may request that the Central Coast Water Board take action after providing notice and the opportunity for public comment to increase monitoring and reporting requirements where monitoring results, pesticide use patterns, or other indicators suggest that the increase is warranted due to an increased threat to water quality. The Executive Officer is hereby delegated the authority pursuant to Water Code section 13223 to reduce monitoring and reporting requirements, including adjusting time schedules, where growers are coordinating efforts at watershed or subwatershed scales or where regional treatment facilities are implemented, or other indicators suggest that the reduction is warranted due to a reduced threat to water quality.

ROGER W. BRIGGS
Executive Officer

Date

Table 1. Major Waterbodies in Agricultural Areas¹

Hydrologic SubArea	Waterbody Name	Hydrologic SubArea	Waterbody Name
30510	Harkins Slough	30920	Natividad Creek
30510	Pajaro River	30920	Quail Creek
30510	Salsipuedes Creek	30920	Salinas Reclamation Canal
30510	Watsonville Slough	31022	Chorro Creek
30510	Watsonville Creek ²	31023	Los Osos Creek
30530	Carnadero Creek	31023	Warden Creek
30530	Llagas Creek	31024	Prefumo Creek
30530	Furlong Creek ²	31031	Arroyo Grande Creek

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30530	San Juan Creek	31031	Los Berros Creek
30530	Tesquisquita Slough	31210	Bradley Canyon Creek
30530	Millerton Canal	31210	Bradley Channel
30600	Moro Cojo Slough	31210	Green Valley Creek
30910	Alisal Slough	31210	Main Street Canal
30910	Beach Creek Ditch ²	31210	Orcutt Solomon Creek
30910	Blanco Drain	31210	Oso Flaco Creek
30910	Old Salinas River	31210	Little Oso Flaco Creek
30910	Salinas River (below Gonzales Rd.)	31210	Santa Maria River
30920	Salinas River above Gonzales Rd. and below Nacimiento R.)	31310	San Antonio Creek ²
30910	Tembladero Slough	31410	Santa Ynez River
30910	Santa Rita Creek ²	31531	Bell Creek
30920	Alisal Creek	31531	Glenn Annie Creek
30920	Chualar Creek	31531	Los Carneros Creek ²
30920	Espinosa Slough	31534	Arroyo Paredon Creek
30920	Gabilan Creek	31534	Franklin Creek

¹ At a minimum, sites must be included for these waterbodies in agricultural areas. Sites may be proposed for addition or modification to better assess the impacts of waste discharges from irrigated lands to surface water. Dischargers choosing to comply with surface receiving water quality monitoring, individually (not part of a cooperative monitoring program) must only monitor sites for waterbodies receiving the discharge.

² These creeks are included because they are newly listed waterbodies on the 2010 303(d) list of Impaired Waters that are associated with areas of agricultural discharge.

Table 2. Surface Receiving Water Quality Monitoring Parameters

Parameters and Tests	RL ³	Monitoring Frequency ¹
Photo Monitoring		
Upstream and downstream photographs at monitoring location		With every monitoring event
<u>WATER COLUMN SAMPLING</u>		
Physical Parameters and General Chemistry		
Flow (field measure) (CFS) following SWAMP field SOP ⁹	.25	Monthly, including 2 stormwater events
pH (field measure)	0.1	"
Electrical Conductivity (field measure) (uS/cm)	2.5	"
Dissolved Oxygen (field measure) (mg/L)	0.1	"
Temperature (field measure) (°C)	0.1	"
Turbidity (NTU)	0.5	"
Total Dissolved Solids (mg/L)	10	"
Total Suspended Solids (mg/L)	0.5	"
Nutrients		
Total Nitrogen (mg/L)	0.5	Monthly, including 2 stormwater events
Nitrate + Nitrite (as N) (mg/L)	0.1	"
Total Ammonia (mg/L)	0.1	"
Unionized Ammonia (calculated value, mg/L)		"
Total Phosphorus (as P) (mg/L)	-	"
Soluble Orthophosphate (mg/L)	0.01	"
Water column chlorophyll a (mg/L)	0.002	"
Algae cover, Floating Mats, % coverage	-	"
Algae cover, Attached, % coverage	-	"
Water Column Toxicity Test		
Algae - <i>Selenastrum capricornutum</i> , 4 day	-	Twice in dry season, twice in wet season
Water Flea – <i>Ceriodaphnia</i> (7-day chronic)	-	"
Fathead Minnow - <i>Pimephales promelas</i> (7-day chronic)	-	"
Toxicity Identification Evaluation (TIE)	-	As directed by Executive Officer
Pesticides² (ug/L)		
Carbamates		
Aldicarb	0.05	4 times, concurrent with water toxicity monitoring, in second year of Order term
Carbaryl	0.05	"

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Parameters and Tests	RL ³	Monitoring Frequency ¹
Carbofuran	0.05	"
Methiocarb	0.05	"
Methomyl	0.05	"
Oxamyl	0.05	"
Organophosphate Pesticides		
Azinphos-methyl	0.02	"
Chlorpyrifos	0.005	"
Diazinon	0.005	"
Dichlorvos	0.01	"
Dimethoate	0.01	"
Dimeton-s	0.005	"
Disulfoton (Disyton)	0.005	"
Malathion	0.005	"
Methamidophos	0.02	"
Methidathion	0.02	"
Parathion-methyl	0.02	"
Phorate	0.01	"
Phosmet	0.02	"
Herbicides		
Atrazine	0.05	"
Cyanazine	0.20	"
Diuron	0.05	"
Glyphosate	2.0	"
Linuron	0.1	"
Paraquat dichloride	4	"
Simazine	0.05	"
Trifluralin	0.05	"
Metals (ug/L)		
Arsenic (total) ^{5,7}	0.3	4 times, concurrent with water toxicity monitoring, in second year of Order term
Boron (total) ^{6,7}	10	"
Cadmium (total & dissolved) ^{4,5,7}	0.01	"
Copper (total and dissolved) ^{4,7}	0.01	"
Lead (total and dissolved) ^{4,7}	0.01	"
Nickel (total and dissolved) ^{4,7}	0.02	"
Molybdenum (total) ⁷	1	"
Selenium (total) ⁷	0.30	"
Zinc (total and dissolved) ^{4,5,7}	0.10	"
Other (ug/L)		
Phenol I ⁸	10	4 times, concurrent with water toxicity monitoring, in second year of Order term
Hardness (mg/L as CaCO3)	1	"
Total Organic Carbon (ug/L)	0.6	"

Parameters and Tests	RL ³	Monitoring Frequency ¹
<u>SEDIMENT SAMPLING</u>		
Sediment Toxicity - Hyalella azteca 10-day		Annually
Benthic Invertebrate and associated Physical Habitat Assessment	SWAMP SOP	Once during the second year of Order concurrent with sediment toxicity sampling
Pyrethroid Pesticides in Sediment (ug/kg)		
Gamma-cyhalothrin	2	Once during second year of Order, concurrent with sediment toxicity sampling
Lambda-cyhalothrin	2	
Bifenthrin	2	"
Beta-cyfluthrin	2	"
Cyfluthrin	2	"
Esfenvalerate	2	"
Permethrin	2	"
Cypermethrin	2	"
Danitol	2	"
Fenvalerate	2	"
Fluvalinate	2	"
Organochlorine Pesticides in Sediment		
DCPA	10	"
Dicofol	2	"
Other Monitoring in Sediment		
Chlorpyrifos (ug/kg)	2	"
Total Organic Carbon	0.01%	"
Sulfide		"
Sediment Grain Size Analysis	1%	"

¹Monitoring is ongoing through all five years of the Order, unless otherwise specified. Monitoring frequency may be used as a guide for developing alternative Sampling and Analysis Plan.

²Pesticide list may be modified based on specific pesticide use in Central Coast Region. Analytes on this list must be reported, at a minimum.

³Reporting Limit, taken from SWAMP where applicable.

⁴Holmgren, Meyer, Cheney and Daniels. 1993. Cadmium, Lead, Zinc, Copper and Nickel in Agricultural Soils of the United States. J. of Environ. Quality 22:335-348.

⁵Sax and Lewis, ed. 1987. Hawley's Condensed Chemical Dictionary. 11th ed. New York: Van Nostrand Reinhold Co., 1987. Zinc arsenate is an insecticide.

⁶<http://www.coastalagro.com/products/labels/9%25BORON.pdf>; Boron is applied directly or as a component of fertilizers as a plant nutrient.

⁷Madramootoo, Johnston, Willardson, eds. 1997. Management of Agricultural Drainage Water Quality. International Commission on Irrigation and Drainage. U.N. FAO. SBN 92-6-104058.3.

⁸<http://cat.inist.fr/?aModele=afficheN&cpsid=14074525>; Phenols are breakdown products of herbicides and pesticides. Phenols can be directly toxic and cause endocrine disruption.

⁹See SWAMP field measures SOP, p. 17

mg/L – milligrams per liter; ug/L – micrograms per liter; ug/kg – micrograms per kilogram;

NTU – Nephelometric Turbidity Units; CFS – cubic feet per second;

Table 3. Third Party Group Reporting Time Schedule

Task	Compliance Date
Third Party Group Notice of Intent	Within 90 days of adoption of Order No. R3-2011-0006
Discharger Election to Participate in Third Party Group	Within 60 days of Issuance of Notice of Applicability Issued by Executive Officer
Executive Officer Time Frame For Issuing Notice of Applicability	Within 30 days of Issuance of Notice of Intent to Be Third Party Group
Third Party Group Submittal of General Report	Within six (6) months of Receipt of Notice of Applicability
Implementation of General Report	Within 30 days of Executive Officer Approval of General Report
Submittal of Annual Third Party Group Report	Within 1 year Executive Officer's Approval of the Third Party Group's General Report, and Annually Thereafter

¹ Dates are relative to adoption of this Order, unless otherwise specified.